



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/752,740	01/03/2001	Atsushi Fuchimukai	P20187	1186

7590 10/06/2003

GREENBLUM & BERNSTEIN, P.L.C.  
1941 ROLAND CLARKE PLACE  
RESTON, VA 20191

EXAMINER

SELBY, GEVELL V

ART UNIT	PAPER NUMBER
----------	--------------

2615

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/752,740

Applicant(s)

FUCHIMUKAI ET AL.

Examiner

Gevell Selby

Art Unit

2615

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Priority*

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. 09752740, filed on 1/03/01.

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. **Claims 1, 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al., US 5,900,909, in view of Okano et al., US 5, 402,197.**

In regard to claim 1, Parulski et al., US 5,900,909, discloses a digital camera comprising:

“a position sensor which detects a position of a camera body of said digital camera relative to the direction of gravity (see column 5, lines 27-33);

a memory in which image data of a captured image is recorded (see column 3, lines 30-33);

and a controller (see figure 2, element 22)”.

Parulski et al., US 5,900,909, lacks “at least one acceleration sensor which detects an acceleration acted upon said camera body” and a controller “wherein if the magnitude

· Art Unit: 2615

of said acceleration detected by said at least one acceleration sensor at the time said captured image is produced is smaller than a predetermined value, said controller records said image data in said memory together with data on a position of said camera body that is detected by said position sensor at the time said captured image is produced, and wherein if said magnitude of said acceleration detected by said at least one acceleration sensor at the time said captured image is produced is equal to or greater than said predetermined value, said controller deems said data on said position of said camera body as invalid data and records only said image data in said memory.”

Okano et al., US 5, 402,197, discloses a camera-shake alarming apparatus that: determines the limit value of camera-shake (see figure 3, element s4); detects the amount of camera-shake with an angular speed or acceleration sensor (see figure 3, element s5 and column 4, lines 43-44); compensates for the camera-shake (see figure 3, element s6); determines whether the camera-shake amount is over the predetermined amount (see figure 3, element s7) and if it is an alarm is set (see figure 3, element s8). Okano et al., US 5, 402,197, teaches that image blur can be prevented beforehand by using the alarm system (see column 3, line 44-48).

The camera disclosed by Parulski et al., US 5,900,909, could be modified to have a camera-shake alarming system as disclosed by Okano et al., US 5, 402,197, to notify the controller not to record position information when the predetermined camera shake limit is exceeded. It would have been obvious to a person skill in the art at the time of invention to modify Parulski et al., US 5,900,909, in view of Okano et al., US 5, 402,197, to have “at least one acceleration sensor which detects an acceleration acted upon said

. Art Unit: 2615

camera body” and a controller “wherein if the magnitude of said acceleration detected by said at least one acceleration sensor at the time said captured image is produced is smaller than a predetermined value, said controller records said image data in said memory together with data on a position of said camera body that is detected by said position sensor at the time said captured image is produced, and wherein if said magnitude of said acceleration detected by said at least one acceleration sensor at the time said captured image is produced is equal to or greater than said predetermined value, said controller deems said data on said position of said camera body as invalid data and records only said image data in said memory” in order to prevent image blur.

In regard to claim 4, Parulski et al., US 5,900,909, in view of Okano et al., US 5, 402,197, discloses all the limitations of claim 1. Parulski et al., US 5,900,909, discloses a camera wherein “said position sensor comprises a ball, a light emitting element and more than one light receiving element (see column 5, lines 28-33).”

In regard to claim 5, it is implied that the camera disclosed by Parulski et al., US 5,900,909, in view of Okano et al., US 5, 402,197, “in the case where an acceleration detected by said acceleration sensor is in the opposite direction to the direction of gravity, said data on said position of said camera is recorded regardless of the magnitude of said acceleration.” The specification discloses that the ball does not move from the lowest position in the direction of gravity sensor (see background, paragraph 20), which is the correct sensor.

• Art Unit: 2615

**3. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al., US 5,900,909, in view of Okano et al., US 5,402,197, in further view of Hara et al., US 5,686,665.**

In regard to claim 2, Parulski et al., US 5,900,909, in view of Okano et al., US 5,402,197, discloses all the limitations of claim 1. Parulski et al., US 5,900,909, in view of Okano et al., US 5,402,197, lacks at least one acceleration sensor comprising:

“a first acceleration sensor which exclusively detects an acceleration in a horizontal direction; and

a second acceleration sensor which exclusively detects an acceleration in a vertical direction perpendicular to said horizontal direction.”

Hara et al., US 5,686,665, discloses a camera comprising:

“a first acceleration sensor which exclusively detects an acceleration in a horizontal direction (see column 5, lines 13-16 and column 3, lines 12-14); and

a second acceleration sensor which exclusively detects an acceleration in a vertical direction perpendicular to said horizontal direction (see column 5, lines 13-16 and column 3, lines 12-14);.”

It would have been obvious to a person skilled in the art at the time of invention to modify Parulski et al., US 5,900,909, in view of Okano et al., US 5,402,197, in further view of Hara et al., US 5,686,665, to have three acceleration sensors in order to measure acceleration in the three axial directions.

• Art Unit: 2615

4. **Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parulski et al., US 5,900,909, in view of Okano et al., US 5,402,197, in further view of Nakajima et al., US 5,669,147.**

In regard to claim 3, Parulski et al., US 5,900,909, in view of Okano et al., US 5,402,197, discloses all the limitations of claim 1. Parulski et al., US 5,900,909, in view of Okano et al., US 5,402,197, lacks “wherein said position sensor comprises a ball, a surface layer thereof being made of a conductive material.”

Nakajima et al., US 5,669,147, discloses a camera wherein the “position sensor comprises a ball, a surface layer thereof being made of a conductive material (see fig 2C and column 2, lines 32-36).” Nakajima et al., US 5,669,147, teaches that by using conductive particles the tilt sensor does not cause on/off chattering between the electrodes (see column 1, lines 58-60).

It would have been obvious to a person skilled in the art at the time of invention to modify Parulski et al., US 5,900,909, in view of Okano et al., US 5,402,197, in further view of Nakajima et al., US 5,669,147, to have a position sensor with a conductive ball in order to not cause chattering between the electrodes.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following art discloses cameras with acceleration or position sensors:

Romano et al., US 5,209,343

Kagle, US 6,148,149

• Art Unit: 2615

Dunton et al., US 6,304,284

Nakano et al., US 5,640,627

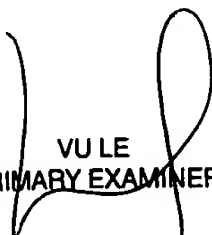
Enomoto, US 5,150,150.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gevell Selby whose telephone number is 703-305-8623. The examiner can normally be reached on 8:00 A.M. - 5:30 PM (every other Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andy Christensen can be reached on 703-305-9644. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

gvs

  
VU LE  
PRIMARY EXAMINER